CONTENTS OF VOLUME 16

Number 1

W. C. Eckelman — 1 Editorial

Robert N. Hanson, Lothar A. Franke and Michael L. Kaplan — 3 Synthesis and evaluation of (17α,20E)21-[^{125}I]iodo-11-substituted-19-norpregna-1,3,5(10),20-tetraene-3,17β-diols: the influence of 11-stereochemistry on tissue distribution of radioiodinated estrogens

D. Blok, R. I. J. Feitsma, M. N. J. M. Wasser, W. Nieuwenhuizen and E. K. J. Pauwels — 11 A new method for protein labeling with ^{99m}Tc

John W. Tse, Leonard I. Wiebe and Antoine A. Noujaim — 17 Comparative studies of radiotracer citrates in oncological models—2. ^{153}Sm–citrate and ^{67}Ga–citrate

Carla J. Mathias, Michael J. Welch, David B. Schwartz, Stephen M. Spaethe and Philip Needleman — 25 Differentiation *in vivo* of the sequential blood cell invasion following ureter obstruction of the rabbit kidney

J. Shani, S. Mohd, W. Wolf and L. E. Walker — 33 Compartmental biodistribution of a monoclonal antibody against human lung adenocarcinoma grown in athymic mice

Himadri S. Sarkar, Mridula Misra and Somenath Banerjee — 41 Biodistribution of two ^{99m}Tc-cardiac glycosides with end glucose unit: effect of lipophilicity on their relative myocardial accumulation

O. T. DeJesus, G. J. C. Van Moffaert and A. M. Friedman† — 47 Evaluation of positron-emitting SCH 23390 analogs as tracers for CNS dopamine D1 receptors

C. A. Otto, G. K. Mulholland, S. E. Perry, R. Combs, P. S. Sherman and S. J. Fisher — 51 *In vitro* and *ex vivo* evaluation of cyclic aminoalkyl benzilates as potential emission tomography ligands for the muscarinic receptor

Atsushi Ando, Itsuko Ando, Tatsunosuke Hiraki and Kinichi Hisada — 57 Relation between the location of elements in the periodic table and various organ-uptake rates

M. S. Roy, K. S. Harrison, E. Harvey and T. Mitchell — 81 Ocular blood flow in dogs using radiolabelled microspheres

Z. H. Oster, P. Som, J. P. Bazin, M. Di Paola, C. Raynaud, H. L. Atkins and R. Di Paola — 85 The role of factor analysis in the evaluation of new radiopharmaceuticals

Thornton Sargent III, Ulrich Braun, Gisela Braun, Natalia Kusubov and Kay S. Bristol — 91 Cerebral and peripheral demethylation of psychotomimetics measured by expired $^{14}CO_2$

Corrigendum — 101

Number 2

IN VIVO DIAGNOSIS AND THERAPY OF HUMAN TUMORS WITH MONOCLONAL ANTIBODIES

Part I

V Papers to appear in Part II

Steven M. Larson, Keith E. Britton, E. Porta and M. Salvatore — VII Preface. *In vivo* diagnosis and therapy of human tumors with monoclonal antibodies: overview of the symposium

M. Salvatore, S. Lastoria, S. Del Vecchio and L. Mansi — 103 Detection of colon cancer with radiolabelled monoclonal antibodies

K. E. Britton, Marie Granowska, C. C. Nimmon, M. Crowther, S. Mather, J. Bomanji and J. Shepherd — 105 Monitoring the *in vivo* behaviour of immunoglobulins with radiotracers: imaging approaches and data processing techniques

Nai-Kong V. Cheung, David Munn, Brian H. Kushner, Naheed Usmani and Samuel D. J. Yeh — 111 Targeted radiotherapy and immunotherapy of human neuroblastoma with G_{D2} specific monoclonal antibodies

James C. Reynolds, Silvana Del Vecchio, Harumi Sakahara, Margarita E. Lora, Jorge A. Carrasquillo, Ronald D. Neumann and Steven M. Larson — 121 Anti-murine antibody response to mouse monoclonal antibodies: clinical findings and implications

Luigi Mansi, Nicola Panza, Secondo Lastoria, Giovanni Pacilio and Marco Salvatore — 127 Diagnosis of ovarian cancer with radiolabelled monoclonal antibodies: our experience using ^{131}I–B72.3

Jeffrey Schlom, David Colcher, Mario Roselli, Jorge A. Carrasquillo, James C. Reynolds, Steven M. Larson, Paul Sugarbaker, Steven E. Tuttle and Edward W. Martin — 137 Tumor targeting with monoclonal antibody B72.3

S. Del Vecchio and J. C. Reynolds — 143 Determination of antigen concentration and distribution in human tumors: the quantitative autoradiographic approach

G. Mariani, A. D. V. D. Abbeele, C. N. Venkateshan, A. Kaldany, S. Ito, S. J. Adelstein and A. I. Kassis — 147 Monoclonal antibody internalization by tumor cells: an experimental model for potential radioimmunotherapy applications

A. Giordano, V. Rufini, P. Campioni, A. Vaccaro and L. Troncone — 151 Role of ^{131}I-labelled anti-CEA/CA 19-9 monoclonal antibodies in the diagnosis and follow-up of gastrointestinal tumors

Steven M. Larson, Andrew Raubitschek, James C. Reynolds, Ronald D. Neumann, Karl-Erik Hellstrom, Ingegerd Hellstrom, David Colcher, Jeffrey Schlom, Eli Glatstein and Jorge A. Carrasquillo — 153 Comparison of bone marrow dosimetry and toxic effect of high dose ^{131}I-labeled monoclonal antibodies administered to man

James L. Mulshine, Ingalil Avis, Anthony M. Treston, Philip G. Kasprzyk, Yoichi Nakanishi, Cindy Mobley, Jorge A. Carrasquillo, Steven M. Larson, Bruce Merchant and Frank Cuttitta — 159 *In vivo* diagnosis and therapy of human tumors with monoclonal antibodies: selection of antibodies and preliminary clinical studies in small cell carcinoma of the lung

G. Ferlin, P. Zanco, L. Lusiani and N. Borsato — 163 A new monoclonal antibody antifibrin: preliminary evaluation in the detection of venous thrombosis

E. Seccamani, M. Tattanelli, M. Mariani, E. Spranzi, G. A. Scassellati and A. G. Siccardi — 167 A simple qualitative determination of human antibodies to murine immunoglobulins (HAMA) in serum samples

W. C. Eckelman, C. H. Paik and J. Steigman — 171 Three approaches to radiolabeling antibodies with ^{99m}Tc

Abstracts

W. Ritter, F. Gudat, C. Stähli and H. Mäcke — 177 A new monoclonal antibody (b-12) directed against a breast cancer associated antigen

D. Rusciano, A. Berardi, L. Pacenti and B. Terrana — 177 Concomitant purification of prostatic carcinoma tumor markers (PAP and PSA) from human seminal fluid by HPLC chromatography

G. Paganelli, P. Riva, G. Deleide, A. Clivio, F. Chiolerio, G. A. Scassellati, M. Malcovati and A. G. Siccardi — 177 Targeting of biotinylated anti-tumour monoclonal antibodies by means of radioactive avidin or streptavidin in an animal model

Philippe Thedrez, Mireille Kremer, Chantal Curtet, Catherine Sai, Dominique Guerreau, Jean-Claude Saccavini and Jean-François Chatal — 178 Biodistribution study of radiolabeled monoclonal antibody OC 125 in a nude mouse model intraperitoneally grafted with a human ovarian carcinoma

Mireille Kremer, Didier Ripoche, Chantal Curtet, Philippe Thedrez, Jean-François Gestin and Jean-François Chatal — 178 Immunohistochemical study of melanomas using monoclonal antibodies ME 361 and R 24

L. Dazord, P. Bourguet, B. Desrues, P. Pellen, B. Collet, D. Lhery, M-P. Ramee, Y. Logeais, P. Delaval, P. Pelletier, J. Kernec, J. C. Saccavini, D. Bourel, A. Martin and L. Toujas — 179 Immunoscintigraphic detection of lung squamous cell carcinoma with an iodine 131-labelled monoclonal antibody

C. Curtet, S. Okoka, P. Thedrez, J. C. Saccavini and J. F. Chatal — 180 Magnetic resonance imaging using NMR contrast agent gadolinium labeled monoclonal antibodies, Gd–DTPA–Mab 73.3 and 19.9 directed against CRC human tumor and Gd–DTPA–Mab OC 125 directed against human ovarian tumor

Mario Roselli, David Colcher, Jorge A. Carrasquillo, Kunihiko Yokoyama, James C. Reynolds, Richard Adams, Barbara Francis, Otto A. Gansow, Steven Larson and Jeffrey Schlom — 180 Biodistribution of monoclonal antibody in patients with metastatic colorectal cancer: *in vivo* comparison of ^{111}In vs ^{125}I–B72.3 IgG

Kayoko Nakamura, Atsushi Kubo and Shozo Hashimoto — 181 Favorable combination of monoclonal antibodies and tumors for immunoscintigraphy

K. Scheidhauer, G. Leinsinger, E. Moser, O. F. Scheiffarth, K. Riedel and F. H. Stefani — 182 Immunoscintigraphy in primary intraocular malignant melanoma

A. A. Epenetos — 182 Radiolabelled monoclonal antibodies for therapy of ovarian cancer

Jorge A. Carrasquillo, James C. Reynolds, Ronald D. Neumann, Louis A. Matis, Patricia Perentesis, Mark Rotman, Ingegerd Hellstrom, Karl-Erik Hellstrom and Steven M. Larson — 183 Preliminary experience with high dose radiolabeled antibody for the treatment of human melanoma

Jorge A. Carrasquillo, Paul A. Bunn, James C. Mulshine, Kenneth A. Foon, James C. Reynolds, Robert W. Schroff, Patricia Perentesis and Steven M. Larson — 184 Considerations in the diagnosis and therapy of human T-cell lymphoma with monoclonal antibodies

Number 3

PART I—SPECIAL ISSUE

The Use of Animal Models in the Development of Radiopharmaceuticals

R. M. Lambrecht and W. C. Eckelman — V Introduction. The use of animal models in the development of radiopharmaceuticals

Adrian D. Nunn — 187 HPLC as the archetypical animal

Edward Deutsch, Alan R. Ketring, Karen Libson, Jean-Luc Vanderheyden and Walter W. Hirth — 191 The Noah's Ark experiment: species dependent biodistributions of cationic ^{99m}Tc complexes

W. C. Eckelman — 233 The use of *in vitro* models to predict the distribution of receptor binding radiotracers *in vivo*

PART II—GENERAL ISSUE SECTION

Kiichi Ishiwata, Keiichiro Yamaguchi, Motonobu Kameyama, Hiroshi Fukuda, Masao Tada, Taiju Matsuzawa, Kenji Muraishi, Jun Itoh, Koichiro Kawashima, Toshihiro Takahashi and Tatsuo Ido — 247 2-Deoxy-2-[^{18}F]fluoro-D-galactose as an *in vivo* tracer for imaging galactose metabolism in tumors with positron emission tomography

W. K. Sidney Yu, S. M. Shaw, J. M. Bartlett, D. C. Van Sickle and B. H. Mock — 255 The biodistribution of [^{75}Se]bis[β-(*N*,*N*,*N*-trimethylamino)ethyl]-selenide diiodide in adult guinea pigs

O. P. D. Noronha and D. N. Pahuja — 261 Radiopharmacological profiles of tracers under pathophysiological conditions. Bone uptake of ^{99m}Tc–phytate in vitamin D deficient rats

Dennis W. Wong, Ashis Mandal, Jerry Brown, Isaac C. Reese, Richard Siegler and Shigeyo Hyman — 269 *In vivo* assessment of ^{111}In-labeled hematoporphyrin derivative in breast tumor-bearing animals

U. P. S. Chauhan, J. Chander, P. Mishra, R. C. Sarin, R. V. Narayanan and B. Singh — 283 ^{99m}Tc(Cu)–mannitol complex: a new agent for dynamic renal function studies

A. B. Packard, S. C. Srivastava, P. Richards, G. E. Meinken, L. Ford and W. R. Benson — 291 Synthesis and biological properties of the lipophilic technetium-99m complex ^{99m}Tc(acac)$_3$

Theodore R. Simon, Michael D. Devous Sr, Ronald G. Paulman, Rodrick Gregory, Richard W. Homan, Catherine Judd, Jeffrey G. Triebel, Sharon Matthiesen, Joachim D. Raese and Frederick J. Bonte — 295 Regional cerebral function and blood flow: complementary single photon emission computed tomography of the brain using xenon-133 and [^{123}I]iodoamphetamine

Mark E. Holland, William R. Heineman and Edward Deutsch — 301 Technetium-99m complexes of dimethylaminomethylene diphosphonate (DMAD)—I. Anion exchange HPLC characterization of ^{99m}Tc(NaBH$_4$)–DMAD mixtures

Mark E. Holland, Joseph Bugaj, William R. Heineman and Edward Deutsch — 313 Technetium-99m complexes of dimethylaminomethylene diphosphonate (DMAD)—II. Biological distributions of ^{99m}Tc–DMAD components isolated by anion exchange HPLC

Technical Note
Gregory A. Even and Mark A. Green — 319 Gallium-68-labeled macroaggregated human serum albumin, ^{68}Ga–MAA

New Patents — i New patents and published patent applications for the United States and over 30 other countries

Number 4

Review
T. J. Ruth, B. D. Pate, R. Robertson and J. K. Porter — 323 Radionuclide production for the biosciences

General Papers
Yasuhito Ohkubo, Akiko Shibuya, Hiroyuki Kohno and Akiko Kubodera — 337 Involvement of transferrin in the uptake of ^{67}Ga in inflammatory and normal tissues

Yasuhito Ohkubo, Fumitake Tsukada, Hiroyuki Kohno and Akiko Kubodera — 343 Relationship between binding activity of ^{67}Ga and low sulfated acid glycosaminoglycans

Sangeeta Pareek, Narendra Jain and A. L. Bhatia — 347 Tritium toxicity in postnatally developing mouse brain: neurochemical changes after continuous exposure

Gerard W. M. Visser, Anita T. Bijma, Jessica A. R. Dijksman, Geertrui C. M. Gorree, Marijke van Walsum and Jacobus D. M. Herscheid — 351 The *in vitro* and *in vivo* behaviour of ^{18}F-labelled 5-fluoro-5,6-dihydrouracil nucleosides

George W. Kabalka, Yuan-Zhu Gai and Shyam Mathur — 359 Synthesis of iodine-125 labeled 3-quinuclidinyl 4′-iodobenzilate

Kazuhiko Yanai, Robert F. Dannals, Alan A. Wilson, Hayden T. Ravert, Ursula Scheffel, Shuji Tanada and Henry N. Wagner Jr — 361 Biodistribution and radiation absorbed dose of (*N*-methyl[^{11}C])-pyrilamine: a histamine H-1 receptor radiotracer

W. K. Bleeker, J. Van der Plas, R. I. J. Feitsma, J. Agterberg, G. Rigter, E. K. J. Pauwels and J. C. Bakker — 365 Hemoglobin radiolabeling: *in vitro* and *in vivo* comparison of iodine labeling with Iodogen and a new method for technetium labeling

Kiichi Ishiwata, Tatsuo Ido, Toshihiro Takahashi, Ren Iwata, Frank Brady, Jun Hatazawa and Masatoshi Itoh — 371 Feasibility study of fluorine-18 labeled dopa for melanoma imaging

P. Faurous, B. Saint-Aubert, A. Szawlowski, H. Collet, M. C. Gouttebel, C. Astre, H. Joyeux and P. Suquet — 375 Estimation of hepatic volume by SPECT during liver regeneration: an experimental study in an animal model

Charles D. Russell, Eva V. Dubovsky and Johnny W. Scott 381 Estimation of ERPF in adults from plasma clearance of ^{131}I–hippuran using a single injection and one or two blood samples

Thomas Chaly and J. Robert Dahl 385 Thin layer chromatographic detection of Kryptofix 2.2.2 in the routine synthesis of [^{18}F]2-fluoro-2-deoxy-D-glucose

John M. Petersen, Vicente J. Caride, Edward K. Prokop, Frank J. Troncale and Richard W. McCallum 389 Sucralfate delays gastric emptying of liquids and solids in duodenal ulcer patients

Italo Zanzi, Suresh C. Srivastava, George E. Meinken, William Robeson, Leonard F. Mausner, Ralph G. Fairchild and Donald Margouleff 397 A new cholescintigraphic agent: ruthenium-97–DISIDA

M. R. Zalutsky, R. C. Bast Jr and R. C. Knapp 405 Pharmacokinetics of a radioiodinated monoclonal antibody F(ab′)$_2$ fragment in a xenograft model with circulating antigen

M. Diksic, M. Trani and S. Nagahiro 413 Synthesis of 6-[^{18}F]fluoropyridoxal and radioactivity distribution in rat at 60 min

Robert Y. L. Chu, Paul V. Carlile Jr and Garo Basmadjian 419 Dual-isotope measurement of lung water

David L. Gildersleeve, Tay-Yean Lin, Donald M. Wieland, Brian J. Ciliax, James M. M. Olson and Anne B. Young 423 Synthesis of a high specific activity ^{125}I-labeled analog of PK 11195, potential agent for SPECT imaging of the peripheral benzodiazepine binding site

Technical Note
Gopal B. Saha, Julie Whitten and Raymundo T. Go 431 Conditions of radioiodination with iodogen as oxidizing agent

New Patents i New patents and published patent applications for the United States and over 30 other countries

Number 5

Review
Mark A. Green and Michael J. Welch 435 Gallium radiopharmaceutical chemistry

General Papers
Robert Paul, Kimmo Aho, Jörgen Bergman, Merja Haaparanta, Jarmo Kulmala, Anni Reissell and Olof Solin 449 Imaging of rats with mammary cancer with two 2-deoxy-2-[^{18}F]fluoro-D-hexoses

A. van Aswegen, A. J. van Wyk, C. P. Herbst, A. C. Otto, A. Viviers, J. Koekemoer, O. Knoesen, M. G. Lötter, P. C. Minnaar, P. H. T. Kleynhans and P. J. Fourie 455 ^{99m}Tc ethoxy methylpropyl isonitrile: a radioactive tracer for myocardial perfusion imaging

Marko Tarle, Zoran Čulig and Ivančica Kokić 461 Unoccupied prolactin binding components of the benign and malignant human prostate in a subclinical and clinical procedure

Joan M. Mack, E. Marvin Henken and Richard P. Spencer 469 Nuclear medicine studies of aging—VII. Humeral deltoid tuberosity on bone scans and radiographs

Hassanali Kassamali, Fazle Hosain, Richard P. Spencer, Warren W. Layne and M. K. Karimeddini 473 Nuclear medicine studies of aging—VIII. Bone to soft-tissue ratio of ^{99m}Tc labeled MDP and HMDP vs age

Chang H. Paik, Syed M. Quadri and Richard C. Reba 475 Interposition of different chemical linkages between antibody and ^{111}In–DTPA to accelerate clearance from non-target organs and blood

P. Som, Z. H. Oster, K. Kubota, M. M. Goodman, F. F. Knapp Jr, D. F. Sacker and D. A. Weber 483 Studies of a new fatty acid analog (DMIVN) in hypertensive rats and the effect of verapamil using ARG microimaging

W. K. Sidney Yu, G. E. Peck and S. M. Shaw — 491 A comparison of the dissolution profiles for several commercially available [^{131}I]sodium iodide capsules

Mark A. Burton, Bruce N. Gray, Cameron Jones and Angela Coletti — 495 Intraoperative dosimetry of ^{90}Y in liver tissue

Andrew P. H. Farnsworth and Andrew T. M. Vaughan — 499 The influence of free DTPA on the dose distribution of yttrium-90 radiolabelled antibodies

J. A. M. Tafani, Y. Lazorthes, B. Danet, J. C. Verdie, J. P. Esquerre, J. Simon and R. Guiraud — 505 Human brain and spinal cord scan after intracerebroventricular administration of iodine-123 morphine

Dennis W. Wong, Shigeyo Hyman, Isaac Reese, Jerry E. Brown, Panukorn Vasinrapee, Richard Siegler and Steven Giannotta — 511 Scintigraphic detection of atherosclerotic plaques in rabbits with ^{111}In-labeled hematoporphyrin derivative

Margaret L. Kornguth, James E. Holden, Timothy R. DeGrado, Chin K. Ng, David M. Raffel and S. John Gatley — 519 Kinetics of [^{18}F]1-fluoro-2,4-dinitrobenzene, a potential probe for the glutathione detoxification system, in perfused working rat heart

Technical Note

Renato B. del Rosario and Richard L. Wahl — 525 Site-specific radiolabeling of monoclonal antibodies with biotin/streptavidin

Announcement — 531

Number 6

Review

Timothy J. Tewson — 533 Procedures, pitfalls and solutions in the production of [^{18}F]2-deoxy-2-fluoro-D-glucose: a paradigm in the routine synthesis of fluorine-18 radiopharmaceuticals

General Papers

Jeffry A. Siegel, Robert E. Lee, David A. Pawlyk, Jo Ann Horowitz, Robert M. Sharkey and David M. Goldenberg — 553 Sacral scintigraphy for bone marrow dosimetry in radioimmunotherapy

Val M. Runge, Dean M. Kaufman, Michael L. Wood, Lester S. Adelman and Stanley Jacobson — 561 Experimental trials with Gd(DO3A)—a nonionic magnetic resonance contrast agent

Michael R. Kilbourn, James E. Carey, Robert A. Koeppe, Michael S. Haka, Gary D. Hutchins, Phil S. Sherman and David E. Kuhl — 569 Biodistribution, dosimetry, metabolism and monkey PET studies of [^{18}F]GBR 13119. Imaging the dopamine uptake system *in vivo*

William A. Pettit and Robert M. Beihn — 577 Purposeful alteration of [^{99m}Tc]pertechnetate biodistribution

Atsushi Takeda, Tomoko Hibino and Shoji Okada — 581 Intensification of tumor affinity of ^{99m}Tc-DL-homocysteine by cooperative use of SH-containing compounds

Shrikant V. Deshpande, Sally J. DeNardo, Claude F. Meares, Michael J. McCall, Gregory P. Adams and Gerald L. DeNardo — 587 Effect of different linkages between chelates and monoclonal antibodies on levels of radioactivity in the liver

M. N. Mehta, L. J. Joseph and K. B. Desai — 599 Simultaneous production of antibodies against T_3 and T_4 in a single animal; their characteristics and usefulness in radioimmunoassay

M. Van Dort, L. Santay, S. W. Schwendner and R. E. Counsell — 603 Potential tumor or organ imaging agents—31. Radioiodinated sterol benzoates and carbamates

Pavel Rauch, Jan Káš and Mojmír Ranný — 609 Utilization of metal ions administered as labelled salts of phosphatidic acid

New Patents — i New patents and published patent applications for the United States and over 30 other countries

IN VIVO DIAGNOSIS AND THERAPY OF HUMAN TUMORS WITH MONOCLONAL ANTIBODIES

Part II

S. M. Larson, K. E. Britton, E. Porta and M. Salvatore — V Introduction. Monoclonal antibodies: technical issues of selection, their role in diagnosis, and therapy of malignant neoplasms—Part II. Naples, Italy

Ingegerd Hellström and Karl-Erik Hellström — 613 Antitumor antibodies for therapy

Luigi Bucci and Eugenio Meucci — 617 Clinical diagnosis and therapy of colo-rectal cancer: state of the art

F. Belli, M. Santinami, M. T. Baldini, A. Testori, A. Maio and N. Cascinelli — 621 Clinical status of diagnosis and therapy of malignant melanoma

Lynn E. Spitler, Ronald Mischak and Patrick Scannon — 625 Therapy of metastatic malignant melanoma using Xomazyme® Mel, a murine monoclonal anti-melanoma ricin A chain immunotoxin

G. L. Buraggi and M. Gasparini — 629 Immunoscintigraphy of melanoma using radiolabelled antibodies: pilot, prospective studies and Italian multicenter clinical trials

M. I. Colnaghi, G. L. Buraggi, S. Canevari, F. Di Re, F. Leoni, C. Mangioni, S. Ménard and R. Orlandi — 633 Evaluation of the suitability of a monoclonal antibody raised against human ovarian carcinoma for therapeutic approaches

Antonio G. Siccardi — 637 Immunoscintigraphy of melanoma and of CEA-secreting carcinomas. Multicenter studies of the Italian National Research Council

V. Caputo, D. De Nardo, M. Antolini, G. Pitucco, P. Gallo, G. Scibilia, A. G. Macchiarelli, A. Cassisi, Q. Caretta, G. Bianco and B. Marino — 641 Myocardial necrosis imaging by ^{111}In monoclonal antimyosin Fab

David A. Goodwin — 645 A new approach to the problem of targeting specific monoclonal antibodies to human tumors using anti-hapten chimeric antibodies

Marie Granowska, K. E. Britton, S. Mather, M. Crowther, C. C. Nimmon, J. Bomanji and J. Shepherd — 653 Diagnosis of ovarian cancer with radiolabelled antibodies

P. Riva, M. Marangolo, S. Lazzari, M. Agostini, G. Sarti, G. Moscatelli, G. Franceschi, A. Spinelli and G. Vecchietti — 659 Locoregional immunotherapy of human ovarian cancer: preliminary results

Steven T. Rosen, A. Michael Zimmer, Robin Goldman-Leikin, Joanne M. Kazikiewicz, Mark S. Dykewicz, Edward A. Silverstein, Stewart M. Spies and Edward H. Kaplan — 667 Progress in the treatment of cutaneous T cell lymphomas with radiolabeled monoclonal antibodies

Number 7

Pradeep K. Garg, Susan K. Slade, Cary L. Harrison and Michael R. Zalutsky — 669 Labeling proteins using aryl iodide acylation agents: influence of *meta* vs *para* substitution on *in vivo* stability

Joseph C. Hung, Wynn A. Volkert and Richard A. Holmes — 675 Stabilization of technetium-99m–D,L-hexamethylpropyleneamine oxime (^{99m}Tc–D,L-HMPAO) using gentisic acid

Michael R. Kilbourn — 681 Thiophenes as phenyl bio-isosteres: application in radiopharmaceutical design—I. Dopamine uptake antagonists

K. A. Stevenson, J. F. Keenan and I. L. Preiss — 687 Rubidium and zinc fluctuations in selected tissues during the development of the BW7756 murine hepatoma

A. Michael Zimmer, Joanne M. Kazikiewicz, Denise I. Webber, Bhupendra A. Patel, Robin Goldman-Leikin, James A. Radosevich, William G. Spies, Stewart M. Spies and Steven T. Rosen — 691 Stability of radioiodinated monoclonal antibodies: *in vitro* storage and plasma analysis

John R. Lever, Robert F. Dannals, Alan A. Wilson, Hayden T. Ravert, Ursula Scheffel, Beth J. Hoffman, Paul R. Hartig, Dean F. Wong and Henry N. Wagner Jr — 697 Synthesis and *in vivo* characterization of D-(+)-(Nl-[^{11}C]methyl)-2-Br-LSD: a radioligand for positron emission tomographic studies of serotonin 5-HT_2 receptors

Richard P. Spencer, Margaret J. Haddon, Ronald J. Rosenberg, Holley M. Dey and John J. Sziklas — 705 Nuclear medicine studies of aging—IX. Resting left ventricular ejection fraction–diastolic area relationship in the "oldest old"

Edward B. Silberstein, Robert A. Clark and Stephen DeLong — 709 Clinical and radiographic correlates of femoral artery visualization on bone scan

Soma Mukherjee, Mita Chatterjee, Mridula Misra, Chandana Sengupta and Somenath Banerjee — 715 Cysteine, a chelating moiety for synthesis of technetium-99m radiopharmaceuticals—Part I. Benzoyl cysteine and derivatives

James R. Ballinger, Bonny Gerson and Karen Y. Gulenchyn — 721 Technetium-99m dithiocarbamates as potential brain agents: evaluation of aliphatic and amine-containing analogues

Leslie A. Khawli and Amin I. Kassis — 727 Synthesis of ^{125}I labeled *N*-succinimidyl *p*-iodobenzoate for use in radiolabeling antibodies

Karen C. Rosenspire, David L. Gildersleeve, Christopher C. Massin, Suresh G. Mislankar and Donald M. Wieland — 735 Metabolic fate of the heart agent [^{18}F]6-fluorometaraminol

Sharon Stone-Elander, Per Roland, Christer Halldin, Moustapha Hassan and Rüdiger Seitz — 741 Synthesis of [^{11}C]sodium thiocyanate for *in vivo* studies of anion kinetics using positron emission tomography (PET)

Technical Note
Amy J. Barnhart, William D. Voorhees and Mark A. Green — 747 Correlation of Cu(PTSM) localization with regional blood flow in the heart and kidney

Letter to the Editors
Yasuhito Ohkubo, Hiromi Koga, Hiroyuki Kohno and Akiko Kubodera — 749 The effect of anti-inflammatory agents on the uptake of ^{67}Ga into experimental granuloma

Announcement — 751

New Patents — i New patents and published patent applications for the United States and over 30 other countries

Number 8

B. M. de Jong, J. M. Ruijter, T. P. van der Woude, M. Mirmiran and E. A. van Royen — 753 Serotonergic denervation does not reduce brain uptake of *n*-isopropyl-*p*-[^{123}I]iodoamphetamine *in vivo*

K. Höll, E. Deisenhammer, J. Dauth, H. Carmann and P. A. Schubiger — 759 Imaging benzodiazepine receptors in the human brain by single photon emission computed tomography (SPECT)

A. Lázníčková, M. Lázníček, R. Richter and J. Květina — 765 Analysis of elimination mechanisms of some ^{99m}Tc-complexes

Michael S. Haka and Michael R. Kilbourn — 771 Synthesis and regional mouse brain distribution of [^{11}C]nisoxetine, a norepinephrine uptake inhibitor

Kiichi Ichiwata, Michio Tomura, Tatsuo Ido, Ren Iwata, Jun Itoh and Motonobu Kameyama — 775 *In vivo* assessment of 6-deoxy-6-[^{18}F]fluoro-D-galactose as a PET tracer for studying galactose metabolism

Kuni Iwai, Tatsuo Ido, Ren Iwata, Mieko Kawamura and **Shuichi Kimura** — 783 Localizing efficiency of [^{48}V]vanadyl-pheophorbide in tumor as a new tumor imaging agent

Elizabeth John, Phillip E. Fanwick, Ann T. McKenzie, Joseph G. Stowell and **Mark A. Green** — 791 Structural characterization of a metal-based perfusion tracer: copper(II) pyruvaldehyde bis(N^4-methylthiosemicarbazone)

Hikaru Seto, Fumishige Ihara and **Masao Kakishita** — 799 Twenty-four-hour whole-body retention of ^{47}Ca–chloride: an index of global bone metabolism in rat models

M. Eisenhut, W. Brandau and **M. Mißfeldt** — 805 Synthesis and *in vivo* testing of a bromobutyl substituted 1,2-dithia-5,9-diazacycloundecane: a versatile precursor for new ^{99m}Tc–bis(aminoethanethiol) complexes

Mark M. Goodman, Kathryn H. Neff, Kathleen R. Ambrose and **F. F. Knapp Jr** — 813 Effect of 3-methyl-branching on the myocardial retention of radioiodinated 19-iodo-18-nonadecenoic acid analogues

J. Kurantsin-Mills, H. M. Jacobs, R. Siegel, M. M. Cassidy and **L. S. Lessin** — 821 Indium-111 oxine labeled erythrocytes: cellular distribution and efflux kinetics of the label

Robert H. Mach, Hank F. Kung, Yu-Zhi Guo, Chi-Chou Yu, Vinayakam Subramanyam and **Joseph C. Calabrese** — 829 Synthesis, characterization and biodistribution of neutral and lipid-soluble ^{99m}Tc–PAT-HM and ^{99m}Tc–TMR for brain imaging

Maryanne Himmelsbach and **Richard L. Wahl** — 839 Studies on the metabolic fate of ^{111}In-labeled antibodies

New Patents — i New patents and published patent applications for the United States and over 30 other counties